

# THE ROLE OF THE TEACHER IN OPTIMIZING THE USE OF IPAD IN IT MIDDLE SCHOOL STUDENTS AR-RAIHAN BANDAR LAMPUNG AS SOCIAL STUDIES LEARNING MEDIA TO INCREASE DIGITAL LITERACY

Dini Novita Sari

*Department of Social Sciences Education, University of Lampung, Indonesia.*

## ABSTRACT

*The purpose of this study was to determine the teacher's role in optimizing the use of iPad in SMP IT Ar Raihan Bandar Lampung students as social studies learning media to increase digital literacy. The method used is descriptive qualitative method with a sample of 3 informants, data collection techniques using observation, interviews and documentation. The data analysis technique uses source triangulation. The results of the study show that the teacher directs and ensures that his students are able to obtain much of the information needed, the role of the teacher in optimizing the use of the iPad as a learning medium by maximizing in choosing, compiling, and curating learning content that is in accordance with the curriculum and learning objectives. Learning materials that are relevant, accurate, and appropriate to the level of understanding of students in a way that aligns technology with subject matter.*

**Keywords:** *Teacher's Role, Digital Literacy, Triangulation.*

## 1. Introduction

One of the developments in the world of education is influenced by advances in science and technology, especially in the field of information and communication technology, which has led to the increasingly rapid spread of globalization and has had an impact in various sectors. The use of learning media in the form of technology is very important to support the learning process. To support the education system, learning tools or media are needed; these media can be in the form of technology. The technology used in education can include laptops, projectors and gadgets (Kurniawan et.al., 2019).

In general, the benefit of gadgets in learning is to facilitate interaction between teachers and students so that an effective and efficient teaching and learning process will be created. The specific benefits of having a gadget for delivering material will be that it is easily accepted by students and can improve students' ability to understand the material. Gadgets also have benefits, namely the teaching and learning process will take place in an interesting way and the material will be conveyed clearly (Azizah & Humaisi, 2021).

Teachers are one of the key elements in

the education system. Teachers in the learning process have many roles, including informatory, organizer, motivator, director, initiator, transmitter, facilitator, mediator and evaluator, but now teachers are only understood as teaching staff.

The role of the teacher is to educate students according to school goals and national goals according to current developments. In the era of technological developments, teachers in the learning process follow the times, namely the use of gadgets connected to the internet. Currently, gadgets are not only used as communication technology but can become a new innovation in the world of education. In the era of the 21st century, gadgets are a new challenge for teachers in the development of information technology which can be used as a learning medium in the classroom, considering that teachers today are not the only source of information in learning activities. One form of gadget that can be used as a learning medium is the iPad. The use of the iPad is certainly very helpful in the learning process, with the hope that technology-based learning can be used optimally by teachers and students in obtaining information and being creative in processing learning material.

The demands of technology-based learning in the industrial era 4.0 cannot be postponed and ignored. Risdianto (2019) stated that when entering an era of disruption like now, the world of education is required to be able to equip students with 21st Century Skills. Apart from that, digital literacy skills are also very important, namely the skills to search, manage and convey information as well as skills in using information and technology. Thus, the challenge for teachers and lecturers in equipping students to have the abilities, skills and abilities needed to enter the industrial era 4.0 is important to prepare and implement in learning (Iswatiningsih, 2021).

Jimoyiannis and Gravani (2011) stated that the role of digital literacy in educational programs is very important, because it aims to help students obtain specific information and expected abilities. To successfully utilize computerized media, be skilled in utilizing sophisticated media. computerized media to address the problems of everyday life, understand the social measures and effects of advanced media in our modern society, and develop an encouraging view of advanced media and facing today's demands (Jimoyiannis and Gravani 2011).

The use of iPads or gadgets that is uncontrolled and not suitable for their use can affect children's concentration during class hours at school. According to the International Journal of Neuroscience, gadgets can interfere with the functioning of the human brain or cause brain weakness which results in students' academic grades and students will rarely communicate with them. Friends because they are more engrossed in their gadgets (Iswanti et.al., 2020).

Initial observations or observations were carried out by researchers at SMP IT Ar Raihan Bandar Lampung, where in the last 3 years they have used iPads as learning media at school, iPads are used by teachers and students. Before using the iPad as a learning medium, Ar-Raihan Bandar Lampung IT Middle School had used laptops as a learning medium from the 2007 academic year to the 2018/2019 academic year. The use of laptop devices is considered less effective and less

flexible during the learning process. The aim of SMP IT Ar-Raihan in choosing the iPad as a learning medium at school is to adapt the use of technology in learning media so that it can foster a paradigm that gadget technology can be used as a learning medium and to reduce the use of paper (paperless), so teachers are required to provide resources. Reading related to certain learning materials.

Based on the results of the pre-survey during the classroom learning process, the use of the iPadas a learning medium caused students to lack focus. Problems that arise are that teachers play less of a role in carrying out their duties regarding the use of iPads by Ar-Raihan IT Middle School students, such as a lack of supervision of students in downloading game applications and other social media, so that the efforts used by teachers are less than optimal.

Based on the results of observations that have been carried out, the policy implemented by Ar- Raihan IT SMP Bandar Lampung using iPads for students and teachers certainly has its own goals, one of which is that apart from improving students' digital literacy skills, the use of iPads can also function as a form of IT SMP Ar-Raihan facilitates students in current technological advances and of course this iPad supports the facilities provided by Ar-Raihan IT SMP.

In this research, researchers attempt to analyze and obtain research data so that quick and appropriate follow-up can be carried out with educators who do not yet have good digital literacy competencies. Remembering that digital literacy is very important for children's educators in order to maximize growth and development into the future. Based on pre-survey research conducted by researchers through questionnaires. The research results show that the level of digital literacy is based on class interval values, which are divided into 3 (three) categories, namely low, medium and high categories. These results can be seen using the class interval formula

$$\text{Class Interval} = \frac{\text{Highest score} - \text{Lower score} + 1}{\text{Number of classes}}$$

$$= \frac{60 - 12 + 1}{3} = 16$$

The low digital literacy level category has class

interval values of 12-28. The medium literacy level category has class interval values of 28-44. Meanwhile, the high digital literacy level category has a class interval value of > 44. This can be seen from the following table:

Tabel 1: Interval Kelas

Interval kelas	Kategori	Jumlah	Persentase (%)
12-28	Rendah	24	72,22%
28-44	Sedang	7	19,44%
>44	Tinggi	5	13,89%

Sumber: data diolah (2023)

Table 1 can be seen that there are 24 respondents who have low category digital literacy with a percentage of 72.22%. The medium category was 7 respondents or 19.44%. The results obtained by the majority of respondents did not or did not yet have the ability to be said to be capable in digital literacy which was supported by the results of interviews with teachers that students had not been able to manage the information provided by the teacher so that there were still students who questioned the instructions given, or awareness of digital literacy that was owned by students is less so that it allows disinformation to occur.

Based on this, seeing the current conditions, educational problems occur due to the greater impact arising from the use of *iPad* as a learning medium. Therefore, the role of teachers as educators and parents is expected to be able to supervise the use of *Ipad* in the learning process. Teachers are expected to provide tighter control or supervision to students who use *iPads* in learning media, especially in learning Social Sciences. For example, when giving lessons, the teacher is expected to go around among students to supervise and ensure that students open applications used for learning, not using other applications, so that learning is more effective. If there are children who use other applications, it is hoped that the teacher can give punishment or sanctions to children so that they are deterrent.

Based on the background of the problems above, it can be identified that the role of the teacher who is less than optimal as a supervisor, motivator and other roles in the use of *Ipad* as

learning medium can cause various negative impacts in increasing digital literacy at SMP IT Ar-Raihan Bandar Lampung. The research focus in this study is to discuss the role of the teacher in optimizing the use of *Ipad* in SMP IT Ar-Raihan

Bandar Lampung students as social studies learning media to increase digital literacy. Based on the background above, the formulation of the problem in this study is what is the teacher's role in optimizing *iPad* as a learning medium for SMP IT Ar-Raihan students to increase digital literacy. The research objective was to determine the teacher's role in optimizing *Ipad* as a learning medium for SMPIT Ar-Raihan students in Bandar Lampung to increase digital literacy. The research subjects were students of SMP IT Ar-Raihan Bandar Lampung and teachers at SMP IT Ar-Raihan Bandar Lampung. The object of this research is the teacher's role in optimizing the use of *Ipad* shown by students of SMP IT Ar-Raihan Bandar Lampung.

**Research Method**

The type in this research is qualitative. Qualitative research begins with assumptions and the use of an interpretive/theoretical framework that shapes or influences the study of research problems related to the meaning that individuals or groups impose on a social or human problem. (Creswell, 2015:59).

The research method used in this study is the case study method. Creswell defines case studies as a type of design in qualitative research which can be the object of research and also the results of the research. Case study research is a qualitative approach in which research explores real life, contemporary limited systems (cases), or various limited systems (various cases), through detailed and in-depth data collection involving various sources of information or multiple sources of information (for example, observations, interviews, audio-visual materials, and documents

and various reports), and report case descriptions and case themes (Creswell, 2015:135).

The subjects in this study were students of SMP IT Ar-Raihan Bandar Lampung. The object of this research is the role of teachers in optimizing the use of iPads as learning media at Ar-Raihan IT Middle School in Bandar Lampung.

The informants in this research, namely the Key Informant, are Ar-Raihan IT Middle School Teachers, the key informants in this research are 3 informants, namely the principal, class teacher and representatives of social studies subject teachers, while the Additional Informants are Students, additional informants in the research took 3 students in SMP IT Ar-Raihan class VII, VIII, and IX.

Qualitative data collection techniques are carried out using observations (from non-participants to participants), interviews (from closed to open), and documents (from private to public) (Creswell, 2015).

The interview chosen by the researcher was a semi-structured interview. Interviews are used to obtain information that is not found in observation. According to Kvale and Brinkmann in Creswell (2015: 241), interviews should be more collaborative, where the researcher and participant tend to be balanced in the process of questioning, interpreting and reporting.

According to Sugiyono (2018: 467) this type of interview is included in the in-depth interview category, where semi-structured interviews are carried out by asking questions freely compared to structured interviews but still according to the interview guidelines that have been made. The purpose of this interview is to find problems in a more open manner, where respondents namely teachers, students, management and the principal of SMP IT Ar-Raihan Bandar Lampung are asked for opinions, ideas or a breakthrough in dealing with an existing problem. In this research, the open interview method was used. Interviews were conducted by researchers by first creating an interview guide.

In document studies, Creswell (2015: 222) explains that several approaches to document studies include writing notes during research,

analyzing public documents, studying biographies, and so on. Documents can be in the form of writing, images, or monumental works by someone. Written documents and archives are sources of data that often have an important position in qualitative research, especially when the target of the study is towards the background or various events that occurred in the past which are closely related to the present conditions or events being studied.

Observation or observation is a form of primary data collection. Observation is a very useful, systematic, and effective way of observing and listening to interactions or phenomena that occur. Observation also includes collecting impressions from the surrounding environment. One of the important things in observation activities is direct contact between the researcher and the subject to be researched (Widi, 2010: 236).

Observations in this study are by making direct observations in the field to find out the actual conditions of the teacher's role in optimizing digital literacy at SMP IT Ar-Raihan Bandar Lampung. In this study, the authors used a triangulation data validation technique using more than one data collection technique, namely interviews and document study. In this research, the triangulation used by researchers is source triangulation. Triangulation of data sources was carried out by means of which the researcher tried to compare the information said by the informants and the observed data with the results of the interviews.

Data analysis in qualitative research begins with preparing and organizing the data (that is, text data such as transcripts, or image data such as photographs) for analysis, then reducing the data into themes through the process of coding and summarizing the code, and finally presenting the data in the form of charts, tables, or discussion (Creswell, 2015:251). The technique that will be used to analyze the data that has been obtained is the qualitative data analysis technique modeled by Miles and Huberman (1992: 20), namely data reduction (data reduction), data presentation (display data),

and drawing conclusions (conclusion, drawing, verification).

## 2. Results and Discussion

The analysis of the results of this study is a summary of the presentation in front which is based on the results of interviews, observations and documentation that have been carried out by researchers. In the framework of the teacher's role in optimizing the use of the iPad as a learning medium to improve students' digital literacy skills, one way that can be done by the teacher so that the use of the iPad optimally is to apply the teacher's role to the fullest so that the learning atmosphere is conducive.

With the teacher realizing his role as an educator, the teacher will better understand the character and abilities of each student, so that he can arrange learning media and teaching materials according to the needs of each student and can improve students' ability to use iPad as a learning medium which increases digital literacy.

By giving practice questions to students, the teacher will know the students' understanding. The results of working on this question can be used by the teacher to determine the teaching materials and media used for the next meeting, so that the learning process runs optimally.

### Inspirator

One of the methods used by Ar-Raihan Bandarlampung IT Middle School teachers is to build a learning atmosphere that students can enjoy and attract students' interest is by making interesting learning videos and creating learning media by utilizing the Canva application on the Ipad, so that learning more interesting. One of the skills of a teacher is to create a pleasant learning atmosphere. Rose and Nicholl (2003: 112 in Hasma, 2017) explain the characteristics of a pleasant learning atmosphere as:

*Creating an environment without stress, an environment that is safe to make mistakes, but raises the hope of achieving success very high  
Ensure that teaching materials are relevant to their benefits and*

*importance in meeting student expectations*

*Guaranteeing that an emotionally positive learning process can take place, in general this atmosphere can grow if learning is done with other people, there is humor and encouragement, regular breaks and breaks, and enthusiastic support  
Consciously involving all the senses as well as the left and right brain thoughts*

*Challenging students to be able to think far ahead and express what they are learning by directing their intelligence optimally to understand the teaching material*

*Consolidate the teaching material that has been studied by reviewing it in relaxed periods.*

The learning media used by Ar-Raihan IT Middle School teachers is the iPad. Using the iPad in learning makes it easier for students to receive the material provided by the teacher and is able to improve students' ability to understand the material. With the help of the iPad, different interpretations between teachers can be avoided and information gaps between teachers and students and students and students wherever they are. Learning media is used by teachers to make simple presentations, create videos as learning media that can attract students' interest, as well as giving assignments to students in the form of infographics that can increase students' digital literacy competencies. The results of this research are in line with research by Pambudi and Windasari (2022) that learning media as a means of learning is adapted to changes in the use of technology.

The Role of Teachers in Optimizing the Use of Ipad as Student Learning Media at SMP IT Ar- Raihan Bandarlampung to Increase Digital Literacy. In learning activities using iPad as a learning medium for SMP IT Ar-Raihan Bandarlampung students to improve digital literacy, several roles of the teacher in optimizing the use of iPad SMP IT Ar-Raihan Bandarlampung are:

**Corrector**

As a corrector, the teacher must be able to distinguish between good grades and bad grades (Singkoh, 2021). Corrections made by SMP IT Ar-Raihan Bandar Lampung teachers during the learning process are by evaluating the use of iPads used by students to stay focused on learning material.

Evaluation of the use of the iPad during learning is one of the preventive steps taken by the teacher to prevent students from opening other applications that are not used in the learning process (Lukitoyo & Wiriantu, 2020). The teacher evaluates the learning material delivered by giving practice questions to students. Giving this question can help teachers understand the abilities of students and the application of teaching media that is used effectively and efficiently in helping teachers carry out competency assessments owned by students. Giving practice questions to students is carried out through online applications such as quizizz, kahoot, and also utilizing the school's LMS (Learning Management System), namely the SAHLA system, to support students' digital literacy activities (Awiria et al., 2022).

**Informers**

Teachers always provide information according to students' needs. The information provided regarding the learning material is presented by adding cases and articles that are used as examples in the learning process being discussed. By providing related cases and articles it makes it easier for students to apply the material provided in the practice questions given. The media used by teachers in delivering material that is prepared so that it is easy for students to understand is by making learning videos that are more applicable so that students can understand the material presented easily (Prayoga & Muryanti, 2021).

Learning materials that have been compiled and prepared by the teacher will be uploaded to the existing academic system, namely Sahla, so that students can read and study the material first before learning begins.

**Organizer**

Teachers play a role in managing various academic activities, both intracurricular and extracurricular, so that student effectiveness and efficiency are achieved. One of the ways teachers ensure the learning process takes place as planned is by managing students in using iPads as learning media during the learning process so that undesirable things can be avoided. Teachers also control students' iPads by using the JamSchool application to see what activities are used while studying, so unrelated applications will be restricted or locked from the iPad.

**Motivators**

As a motivator, the teacher's role is to arouse students' motivation to be enthusiastic about learning and enthusiastic in pursuing knowledge so that learning objectives can still be achieved well. The teacher provides examples of knowledge that exists in everyday life related to the material presented, so that students can understand more easily and remain focused on learning. Apart from that, in the learning process teachers will use media that suits students' needs by developing applications that are familiar to students, so that students can more easily understand the material provided (Agustini et al., 2020).

Learning media using features that are familiar to students is an example of using learning media to make it easier for students to find additional material assigned by the teacher, so that students are more enthusiastic in doing their assignments.

**Initiator**

In each meeting the teacher provides different material at each meeting using different media. Teachers must try various learning methods so that it is not monotonous and boring. one of them is by utilizing the applications that are on the iPad, namely making presentations with themes available on the iPad, keynote or using Microsoft Powerpoint and Google Slides which are often used to display the material to be delivered. So that the appearance of the material presented is more attractive and concise,so that it is easy for

students to understand (Yuliani et al., 2020).

### **Facilitator**

As a facilitator, teachers create conducive environment to provide students with very comfortable knowledge. In applying learning media, the teacher will guide and direct students to use learning media properly and correctly. So that the use of learning media will be effective and efficient in finding the material needed by students. The teacher gives direct and written directions in working on practice questions, during the work the teacher monitors students through an application that is designated by the teacher, namely Jamschool. The Jamschool application is used to monitor the use of applications opened by students during learning. So that learning objectives can be achieved optimally and the use of the iPad can be optimal.

### **Advisor**

Guidance to students is carried out to direct students to stay focused in participating in learning so that it is in accordance with the rules set by the school. Written and enrichment tests are carried out to test students' understanding of the material that has been presented. The use of iPad is carried out to improve students' ability to use iPad as a learning medium in finding material needed by students. In guiding student teachers to develop blended teaching (Hazmi et al., 2021).

This method is applied by the teacher to improve students' ability to use learning media, namely the iPad. The teacher will guide students in using the iPad which is displayed on the LCD screen, so that students can understand the technical usage steps that are not yet known by students.

### **Demonstrators**

As a demonstrator the teacher must have a broad level of knowledge so that the main target of students is achieved (Apdila, 2021). The iPad, which was used as a learning medium for SMP IT Ar- Raihan Bandar Lampung, at the beginning of its use, the school conducted demonstrations regarding the steps for using an iPad and learning applications to be used during the learning

process. In addition, in the learning process the teacher gives demonstrations about material that requires searching for additional material on the internet before asking students to search material on the internet independently.

The application used by the teacher as a medium for practicing learning materials is Kahoot. Kahoot is a very educative learning media because it provides features that can be used as teaching media (Irwan et al., 2019). Using interactive media makes it easier for teachers to visualize and audio learning material more attractively.

### **Class Manager**

To keep the atmosphere conducive, the teacher will do ice breaking to melt the learning atmosphere which was initially boring into a cool atmosphere by providing interesting games. Apart from doing ice breaking to change the class atmosphere to be more enthusiastic, the teacher also supervises the use of iPads used by students to avoid using other applications that can interfere with learning (Zakkiyah et al., 2022).

### **Mediators**

As a mediator the teacher is expected to have a myriad of understandings and tools to use in the process of teaching and learning activities. The mediator aims to make the teacher maximally convey material to students (Nuryanti, 2009). The teacher provides learning materials that are used as learning materials. This learning material will be used by the teacher to plan learning media that will be used by students.

### **Supervisors**

The teacher helps, improves and critically evaluates the use of iPad as a learning medium so that the learning objectives can be achieved optimally. The method used by teachers so that the maximum use of iPads as learning media is through assignments given by teachers by utilizing learning applications available on iPads that can be used easily (Yuniastuti & Khoiron, 2021).

By utilizing easy learning applications, teachers can help students understand the material provided by the teacher, so that the

learning process is effective and efficient, according to the needs of students. In addition, special applications owned by teachers can monitor and control the use of applications by students to maximize the learning process through iPad as a learning medium. If it is detected that the use of an application that can interfere with the learning process, the teacher will report this to IT so that it can be followed up by stopping or locking the application during the learning process (Hidayah, 2021).

### Evaluators

Teachers are required to evaluate students' understanding of the material by providing practice questions. This evaluation is also applied by the teacher in social studies learning, where at the end of the meeting the teacher will give a quiz through an application, namely Kahoot! and Quizizz. The use of this application is to attract students' interest in the learning process and make it easier for teachers to carry out assessments. This evaluation was carried out to determine the level of students' understanding of the material presented by the teacher. So that students are motivated to learn and complete the tasks given. In addition to

evaluating student understanding, teachers also need to evaluate the teaching materials used.

### 3. Conclusions

Based on the results of the research that has been carried out, the authors draw the following conclusions:

Digital literacy activities using iPad as a learning medium are by creating a program by utilizing an information system named Sahla, replacing several printed books used as learning media used by students and teachers into e-book and pdf forms that can be accessed by residents. school. The teacher directs and ensures that his students are able to obtain much of the information they need, the teacher's role in optimizing the use of iPad as a learning medium by maximizing in selecting, compiling, and curating learning content that is in accordance with the curriculum and learning objectives. learning materials that are relevant, accurate, and appropriate to the level of understanding of students in a way that aligns technology with subject matter. Use of the iPad must support the learning objectives and teaching strategies that have been determined.

### References

- Agustini, D., Lian, B., & Sari, A. P. (2020). School's strategy for teacher's professionalism through digital literacy in the industrial revolution 4.0. *International Journal of Educational Review*, 2(2), 160-173.
- Amalia, L., & Setiaji, K. (2018). Pengaruh Penggunaan Media Sosial Instagram, Teman Sebaya Dan Status Sosial Ekonomi Orangtua Terhadap Perilaku Konsumtif Siswa (Studi Kasus Pada Siswa Kelas Xi Sma Negeri 1 Semarang). *Economic Education Analysis Journal*, 6(3), 835-842. Retrieved from <https://journal.unnes.ac.id/sju/index.php/eeaj/article/view/20320>.
- Anggraeni, A., & Hendrizal, H. (2018). Pengaruh Penggunaan Gadget Terhadap Kehidupan Sosial Para Siswa SMA. *Pelita Bangsa Pelestari Pancasila*, 13(1), 64-76.
- Anwar Sewang, A. S. (2015). *Manajemen Pendidikan*. Malang: Wineka Media.
- Apdila, M. N. (2021). Peran Kepala Madrasah Sebagai Supervisor dalam Peningkatan Kinerja Guru. *Chalim Journal of Teaching and Learning (CJoTL)*, 1(1), 73-84.
- Awiria, A., Prawira, A. Y., Dariyanto, D., & Pujayanah, I. S. (2022). Pelatihan Mengembangkan Evaluasi Pembelajaran Inovatif Menggunakan Google Form, Kahoot Dan Quizziz Di Sekolah Dasar. *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ*, 9(1), 112-119.

- Azizah, D. N., & Humaisi, M. S. (2021). Kebijakan Sekolah terhadap Penggunaan Gadget dalam Pembelajaran IPS Terpadu. *ASANKA: Journal of Social Science and Education*, 2(1), 117-131.
- Bagong, Suyanto. Sutinah. (2005). Metode Penelitian Sosial Berbagai Alternatif.
- Creswell, J. W. (2015). Penelitian kualitatif dan desain riset: memilih di antara lima pendekatan. Yogyakarta: Pustaka Pelajar.
- Dewi, B. E. K., & Sumarni, W. (2020). Efektivitas Penggunaan Media E-Learning Berbasis Website Terhadap Hasil Belajar Kognitif Peserta Didik. *Chemistry in Education*, 9(2), 77-82.
- Fatchan, Achmad. (2016). "Memahami Penelitian Oleh Prof. Dr. Drs. Salladien, BSc." *Journal Social*. 2016. <http://swarapendidikan.um.ac.id/prof-dr-drs-salladien-bsc-memahami-penelitian-kualitatif/>.
- Fauzi, S. A., & Mustika, D. (2022). Peran guru sebagai fasilitator dalam pembelajaran di kelas v sekolah dasar. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(3), 2492-2500.
- Firdaus, W., & Marsudi, M. S. (2021). Konseling Remaja yang Kecanduan Gadget Melalui Terapi Kognitif Behavior. *Studia: Jurnal Hasil Penelitian Mahasiswa*, 6(1), 15-24.
- Ginangjar, A., Putri, N. A., Nisa, A. N. S., Hermanto, F., & Mewangi, A. B. (2019). Implementasi Literasi Digital Dalam Proses Pembelajaran Ips Di Smp Al-Azhar 29 Semarang. *Harmony: Jurnal Pembelajaran IPS dan PKN*, 4(2), 99-105.
- Ginangjar, A., Putri, N. A., Nisa, A. N. S., Hermanto, F., & Mewangi, A. B. (2019). Implementasi Literasi Digital Dalam Proses Pembelajaran Ips Di Smp Al-Azhar 29 Semarang. *Harmony: Jurnal Pembelajaran IPS dan PKN*, 4(2), 99-105.
- Hakim, L & Mukhtar. (2018). Dasar-Dasar Manajemen Pendidikan. Jambi: Timur Laut Aksara.
- Harahap, A. H., Purba, N. I., & Rizky, T. M. (2022). Peran Guru Dan Orang Tua Dalam Memfasilitasi Perkembangan Peserta Didik. *RIYADHAH-Journal of STAI Nurul Ilmi Tanjungbalai*, 1(1), 99-110.
- Harfiyanto, D., Budi Utomo, C., & Budi, T. (1). Pola Interaksi Sosial Siswa Pengguna Gadget Di Sma N1 Semarang. *Journal of Educational Social Studies*, 4(1). <https://doi.org/10.15294/jess.v4i1.6859>.
- Hasma, H. (2017). Keterampilan dasar guru untuk menciptakan suasana belajar yang menyenangkan. *Didaktis: Jurnal Pendidikan Dan Ilmu Pengetahuan*, 17(1).
- Hazmi, H. Y., Tahir, M., & Turmuzi, M. (2021). Implementasi blended learning pada proses pembelajaran 4.0 dalam rangka meningkatkan literasi digital peserta didik kelas 5 SDN 5 cakranegara. *Renjana Pendidikan Dasar*, 1(2), 109-115.
- Hendaryan, R., Hidayat, T., & Herliani, S. (2022). Pelaksanaan literasi digital dalam meningkatkan kemampuan literasi siswa. *Literasi: Jurnal Bahasa dan Sastra Indonesia serta Pembelajarannya*, 6(1), 142-151.
- Hidayah, T. N., Sari, I. H., Widarwati, N. T., & Sulistyowati, N. (2021). Respon Siswa Terhadap Penggunaan Media Aplikasi Genius Dalam Pembelajaran Online Mata Pelajaran Bahasa Inggris Siswa Kelas Xii Otkp Smk Tamansiswa Sukoharjo Tahun 2020/2021. *Accel. world's Res*.
- Idrus, M. (2011). *Metode penelitian Ilmu Sosial*. Yogyakarta: PT. Gelora Akasara Pratama.
- Irianti, Leni. (2020). "Teachers' Perception on Flipped Classroom Model in Digital Literacy Era." *ELT-*

*Lectura*. doi: 10.31849/elt-lectura.v7i2.3685.

- Irwan, I., Luthfi, Z. F., & Waldi, A. (2019). Efektifitas penggunaan kahoot! untuk meningkatkan hasil belajar siswa. *PEDAGOGIA: Jurnal Pendidikan*, 8(1), 95-104.
- Iswanti, D. I., Lestari, S. P., & Hani, U. (2020). Penggunaan gadget terhadap perilaku sosial remaja. *Jurnal Keperawatan*, 12(4), 815-822.
- Iswatiningsih, D. (2021). Guru dan Literasi Digital: Tantangan Pembelajaran di Era Industri 4.0. *Prosiding Transformasi Pembelajaran Nasional (Pro-Trapenas)*, 1(1), 232-245.
- Khodijah, S., & Nurizzati, Y. (2018). Dampak Penggunaan Teknologi Informasi dan Komunikasi terhadap Perilaku Sosial Siswa di MAN 2 Kuningan. *Jurnal Edueksos*, 7(2), 161-176.
- Kurniadi, D., Abdurachman, E., Warnars, H. L. H. S., & Suparta, W. (2018, November). The prediction of scholarship recipients in higher education using k-Nearest neighbor algorithm. In IOP conference series: materials science and engineering (Vol. 434, No. 1, p. 012039). IOP Publishing.
- Kurniawan, M. F. T., & Rokhmani, L. (2019). Pengembangan Media Pembelajaran Interaktif Berbasis Aplikasi Android Untuk Meningkatkan Hasil Belajar Kewirausahaan (Studi Pada Kelas XI APK SMK Muhammadiyah 3 Singosari Materi Aspek Organisasi). *Jurnal Pendidikan Ekonomi*, 12(1), 72- 77.
- Maghfiroh, W. (2022). Upaya Guru Dalam Meningkatkan Kualitas Pembelajaran Melalui Penerapan Teknologi Informasi di MI Miftahul Ulum Bago Pasirian. *Jurnal Petisi (Pendidikan Teknologi Informasi)*, 3(1), 20-28.
- Ma'mun, N., & Mariam, S. (2021). Pelatihan kompetensi literasi digital bagi guru bahasa inggris berbasis e-learning moodle. *Rengganis Jurnal Pengabdian Masyarakat*, 1(1), 69-79.
- Muflihin, A., & Makhshun, T. (2020). Peran Guru Pendidikan Agama Islam dalam Meningkatkan Literasi Digital Siswa sebagai Kecakapan Abad 21. *TA'DIBUNA: Jurnal Pendidikan Agama Islam*, 3(1), 91-103.
- Mukminan. (2019). Peningkatan Kualitas Pembelajaran Pendayagunaan Teknologi Pendidikan. *Makalah Seminar Nasional Teknologi Pendidikan*, Universitas Negeri Surabaya.
- Mulyani, E. W. S. (2018). Dampak pemanfaatan aplikasi android dalam pembelajaran bangun ruang. *Kwangsan: Jurnal Teknologi Pendidikan*, 6(2), 122-136.
- Munir. (2017). *Pembelajaran Digital*. Bandung: Alfabeta.
- Nana Sudjana. (2011). Ahmad Rivai. *Media Pengajaran (penggunaan Dan Pembuatannya)* / Nana Sudjana, Ahmad Rivai.
- Nasution. (2018). *Berbagai Pendekatan dalam Proses Belajar & Mengajar*. Bumi Aksara.
- Nelson, Klara, Marcy Courier, & Gilbert Joseph. (2011). "An Investigation of Digital Literacy Needs of Students." *Journal of Information Systems Education*.
- Ningsih, C. S. (2015). *Penerapan Metode Eksperimen Untuk Meningkatkan Keterampilan Proses Pada Pembelajaran Ipa Siswa Kelas Vi Sdn Puro Pakualaman*. Universitas Negeri Yogyakarta.
- Nurfirdaus, N., & Risnawati, R. (2019). Studi tentang pembentukan kebiasaan dan perilaku sosial siswa (Studi Kasus di SDN 1 Windujanten). *Jurnal Lensa Pendas*, 4(1), 36-46.

- Nuryanti, B. L. (2009). Model Pembelajaran E-Learning Melalui Homepage Sebagai Media Pembelajaran Sehingga Diharapkan Dapat Meningkatkan Minat Dan Kreativitas Siswa. *Jurnal ABMAS (Media Komunikasi dan Informasi Pengabdian Kepada Masyarakat)*, 9, 1-7.
- Oktaviyanti, I., Sutarto, J., & Atmaja, H. T. (2016). Implementasi nilai-nilai sosial dalam membentuk perilaku sosial siswa sd. *Journal of Primary Education*, 5(2), 113-119.
- Olsson, Lena, and Eva Edman-Stålbrant. (2008). "Digital Literacy as a Challenge for Teacher Education." in *Learning to Live in the Knowledge Society*.
- Prayoga, A., & Muryanti, E. (2021). Peran guru dalam pengenalan literasi digital pada anak usia dini pada masa covid-19 di tk se-kecamatan pauh duo. *Generasi Emas: Jurnal Pendidikan Islam Anak Usia Dini*, 4(2), 84-95.
- Prayuda, R. A., Munir, Z., & Siam, W. (2020). Pengaruh Pemakaian Gadget Terhadap Perilaku Sosial Siswa di Sekolah Dasar Negeri Taal 01 Kecamatan Tapen Kab. Bondowoso. *Jurnal Keperawatan Profesional*, 8(1), 40–48. <https://doi.org/10.33650/jkp.v8i1.1020>.
- Puji, Chusna Asmaul. (2017). Pengaruh Media Gadget Pada Perkembangan Karakter Anak. *Dinamika Penelitian: Media Komunikasi Sosial Keagamaan. Volume 17 Nomor 2*.
- Purwanti, Y. G., Maruti, E. S., & Budyartati, S. (2022). Penguatan Literasi Digital Siswa Sekolah Dasar Melalui Penerapan E-learning. *Prosiding Konferensi Ilmiah Dasar*, 3, 288-297.
- Rohman, M. G., & Susilo, P. H. (2019). Peran guru dalam penggunaan media pembelajaran berbasis teknologi informasi dan komunikasi (TIK) studi kasus di TK Muslimat NU Maslakul Huda. *Reforma: Jurnal Pendidikan dan Pembelajaran*, 8(1), 173-177.
- Rosanti, A., Kardi, K., Supiana, S., & Zaqiah, Q. Y. (2022). Peran Guru PAI dalam Literasi Digital melalui Optimalisasi Perpustakaan Digital di Masa Pandemi Covid-19. *JIP-Jurnal Ilmiah Ilmu Pendidikan*, 5(7), 2561-2567.
- Rosiyanti, H., & Muthmainnah, R. N. (2018). Penggunaan Gadget sebagai sumber belajar mempengaruhi hasil belajar pada mata kuliah matematika dasar. *FIBONACCI: Jurnal Pendidikan Matematika Dan Matematika*, 4(1), 25-36.
- Rozalia, M. F. (2017). Hubungan intensitas pemanfaatan gadget dengan prestasi belajar siswa kelas V sekolah dasar. *Jurnal Pemikiran dan Pengembangan Sekolah Dasar (JP2SD)*, 5(2), 722-731.
- Rukhani, S. (2020). Peran Guru Dalam Pengelolaan Kelas Untuk Meningkatkan Prestasi Belajar Siswa Kelas VII. *Al-Athfal*, 1(1), 21-41.
- Saleh, A. A. M. (2021). Peran guru dalam meningkatkan prestasi belajar siswa di MTS Negeri Kota Kupang. *Al Manam: Jurnal Pendidikan Dan Studi Keislaman*, 1-12.
- Sanaki, H. (2015). *Media Pembelajaran Interaktif-Inovatif*. Kaukaba Dipantara.
- Santosa, A. S. E., Santyadiputra, G. S., & Divayana, D. G. H. (2017). Pengembangan e-modul berbasis model pembelajaran problem based learning pada mata pelajaran administrasi jaringan kelas XII teknik komputer dan jaringan di SMK TI Bali global Singaraja. *Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika (KARMAPATI)*, 6(1), 1-11.
- Sari, S. M., & Ganing, N. N. (2021). Pengembangan Media Pembelajaran Powtoon Berbasis Problem Based Learning Pada Materi Ekosistem Muatan Ipa Kelas V Sekolah Dasar. *Jurnal Ilmiah*

*Pendidikan Profesi Guru*, 4(2), 288-298.

- Sari, A. M., Saprudin, D., Sunardi, S., & Sulaeman, Y. (2022). Pelatihan Program Inspiring Teaching bagi Guru-Guru SDN Sangkanwangi 1 dalam Mengatasi Kesulitan Pembelajaran Daring. *Jurnal Abdimas BSI: Jurnal Pengabdian Kepada Masyarakat*, 5(1), 49-58.
- Singkoh, G. (2021). Peran Guru Dalam Meningkatkan Minat Belajar Siswa Pada Pembelajaran Daring Dimasa Pandemi Covid-19 Di SD Katolik St. Antonius Kali. *Edu Primary Journal*, 2(1), 22-30.
- Sinta. (2018). Pengaruh Gadget Terhadap Perkembangan Sosial Anak di TK Aisyiyah Bustanul Athfal VI. *Artikel Penelitian*, 2018, 1-11.
- Sintya (2018). *Penerapan Model Pembelajaran Cooperative Learning Tipe Jigsaw Untuk Meningkatkan Motivasi Belajar Siswa Dan Hasil Belajar Siswa Kompetensi Dasar Akuntansi Perusahaan Dagang Kelas Xi Ak 3 Smk Negeri 1 Depok*. Universitas Negeri Yogyakarta.
- Sofiana, K. A. (2021, October). Pengaruh Model Pembelajaran Langsung (Direct Instruction) dan Tidak Langsung terhadap Hasil Belajar Siswa pada Materi Fisika. In *PISCES: Proceeding of Integrative Science Education Seminar* (Vol. 1, No. 1, pp. 7-15).
- Widayani, S., & Astuti, K. (2020). Pendidikan Dan Pendampingan Remaja Melalui Pola Asuh Demokratis Untuk Mencegah Kecanduan Gadget Menghadapi Era Society 5.0. In *Prosiding Seminar Nasional Milleneial 5.0 Fakultas Psikologi Umby*.
- Wijanarko, I. J., & Setiawati, I. E. (2016). *Ayah ibu baik*. Happy Holy Kids.
- Wulandani, T. B. (2021). Peran Guru Dalam Peningkatan Kualitas Belajar Peserta Didik Pada Pembelajaran Daring Di Madrasah Ibtidaiyah. *EDUCARE: Journal of Primary Education*, 2(1), 75-86.
- Yuliani, M., Simarmata, J., Susanti, S. S., Mahawati, E., Sudra, R. I., Dwiyanto, H., ... & Yuniwati, I. (2020). *Pembelajaran daring untuk pendidikan: Teori dan penerapan*. Yayasan Kita Menulis.
- Yuniastuti, M., & Khoiron, M. (2021). Media pembelajaran untuk generasi milenial. *Surabaya: Scorpio Media Pustaka*.
- Yuniarto, B., & Yudha, R. P. (2021). Literasi digital sebagai penguatan pendidikan karakter menuju era society 5.0. *Edueksos: Jurnal Pendidikan Sosial dan Ekonomi*, 10(2).
- Zakiyyah, D., Suswandari, M., & Khayati, N. (2022). Penerapan Ice Breaking Pada Proses Belajar Guna Meningkatkan Motivasi Belajar Siswa Kelas Iv Sd Negeri Sugihan 03. *Journal of Educational Learning and Innovation (ELIA)*, 2(1), 73-8.